

USSN: 10/015,572  
Art Unit: 2161  
Response to Final action mailed 10/21/2005

### **Amendments to the claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:.

### **Listing of Claims:**

1. (Previously presented) A source selection system in a communication switch having active and redundant data flow paths, said source selection system, comprising:  
  
a plurality of datasources operating independently and outputting in parallel the same data subject to data transmission errors that may be different for each of said datasources;  
  
one of said datasources being selected as an active datasource, wherein the data output thereby is used as active data for onward transmission over the active data flow path within said switch, and the other of said corresponding datasources serving as a redundant datasource wherein the data output thereby acts as substitute data for use in the event of inadequate operational performance of said active datasource;  
  
a validation module associated with said plurality of datasources adapted to monitor said datasources for transmission errors and provide information relating to said transmission errors;  
  
an assessment module receiving said information from said validation module and assessing operational performance of each of said datasources based on said information; and  
  
a source selector responsive to instructions from said assessment module to select as said active datasource one of said datasources based on the operational performance of said plurality of datasources .
2. (Previously presented) The source selection system as claimed in claim 1, wherein said validation module comprises a plurality of validation sub-modules, each one of said plurality of validation sub-modules associated respectively with one of said plurality of datasources.
3. (Previously presented) The source selection system as claimed in claim 2, wherein said validation module performs an integrity check on data transmitted by said datasources to provide information relating to transmission errors.
4. (Previously presented) The source selection system as claimed in claim 3, wherein said assessment module evaluates severity of said transmission errors provided in said information and causes said source selector to select said active datasource based on said severity of said

USSN: 10/015,572

Art Unit: 2161

Response to Final action mailed 10/21/2005

transmission errors.

5.(Previously presented) The source selection system as claimed in claim 4, wherein said integrity check on said data comprises a parity check and a cyclic redundancy check.

6. (Previously presented) The source selection system as claimed in claim 5, wherein said integrity check is performed on a payload portion of said data.

7. (Previously presented) A source selection system as claimed in claim 6, wherein said integrity check is performed on a header portion of said data.

8.(Previously presented) The source selection system as claimed in claim 7, further comprising a plurality of processing cards and an interface card in said communication switch, said plurality of processing cards providing said plurality of datasources, and said source selector operating at input to said interface card.

9. (Previously presented) The source selection system as claimed in claim 8, wherein said integrity check is performed upon said data being received by at least one of said processing cards of said communication switch.

10.(Previously presented) The source selection system as claimed in claim 9, wherein said source selector is a multiplexer.

11. (Previously presented) A method of selecting a datasource in a communication switch, wherein a plurality of datasources output the same data in parallel subject to transmission errors that may be different for each datasource, said method comprising the steps of:

monitoring said datasources for transmission errors to provide information relating to said transmission errors; and

assessing operational performance of each of said datasources based on said information; and

based on the operational performance of said plurality of datasources, selecting one of said datasources as an active datasource, wherein the data output thereby is used as active data for onward transmission, and the other of said datasources serving as a redundant datasource wherein the data output thereby serves as substitute data for use in the event of inadequate performance of said active datasource.

12. (Canceled)

13.(canceled)

USSN: 10/015,572

Art Unit: 2161

Response to Final action mailed 10/21/2005

14.(Previously presented) The method as claimed in claim 11, wherein said monitoring of said first datasources for transmission errors is executed by performing an integrity check on data originating from said datasources.

15. (Previously presented) The method as claimed in claim 14, wherein the active datasource is identified based on the severity of said transmission errors.

16. (Previously presented) The method as claimed in claim 15, wherein said integrity check on said data comprise parity checks and cyclic redundancy checks.

17.(Previously presented) The method as claimed in claim 16, wherein said integrity check is performed on a payload portion of said data.

18. (Previously presented) The method as claimed in claim 17, wherein said integrity check is performed on a header portion of said data.

19.(canceled)

20. (canceled)

21.(Currently amended) In a communication switch including active and redundant data flow paths a source selection system comprising:

a first communication module comprising a first chain of successive data processing elements outputting data,

a second communication module comprising a second chain of successive data processing elements outputting data;

each of said data processing elements in said first communication module having a corresponding data processing element in said second communication module, whereby successive pairs of data processing elements in said first and second communication modules output the same data in parallel subject to transmission errors which may be different for each data processing element of said successive pairs of data processing elements;

cross connects for cross-connecting an output of at least some of said data processing elements in each of said first and second chains with an input of a following said data processing element in the other of said first and second chains;

a validation module associated with said data processing elements adapted to monitor said data processing elements for transmission errors in the data output thereby and provide information relating to said transmission errors;

USSN: 10/015,572

Art Unit: 2161

Response to Final action mailed 10/21/2005

an assessment module receiving said information from said validation module and assessing an operational performance of said data processing elements based on said information; and

a source selector responsive to instructions from said assessment module to select as an upstream active data source for a particular said data processing element one of said data processing elements of a preceding pair of said data processing elements based on the operational performance of said data processing elements in said preceding pair, the other of said data processing elements of said preceding pair of said data processing elements serving as an upstream redundant source until the operational performance ~~thereof of said upstream active source~~ becomes worse than said active-upstream redundant data source, whereupon said source selector switches roles of said active and redundant data sources.

22.(Previously presented) The source selection system as claimed in claim 1, wherein said assessment module continually instructs said source selector to select the datasource with the best operational performance.